

Gearbox Type: GWS

Speed Range: 1.2 – 71 r.p.m.

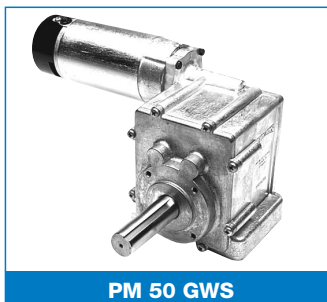
Worm and Multi-Spur Reduction Gear Units Variable Speed – D.C. Permanent Magnet

Enclosures: – PM5 – PM50 – Totally Enclosed (IP 54)
PM6 – PM60 – Drip Proof Internal Fan Cooled (IP 21)

Voltage, Construction, Connections, Motor Performance Specifications and Optional Extras

see pages 72 and 74 for full details.

GWS gearbox with hollow shaft available on request (15mm internal diameter with 5mm keyway).



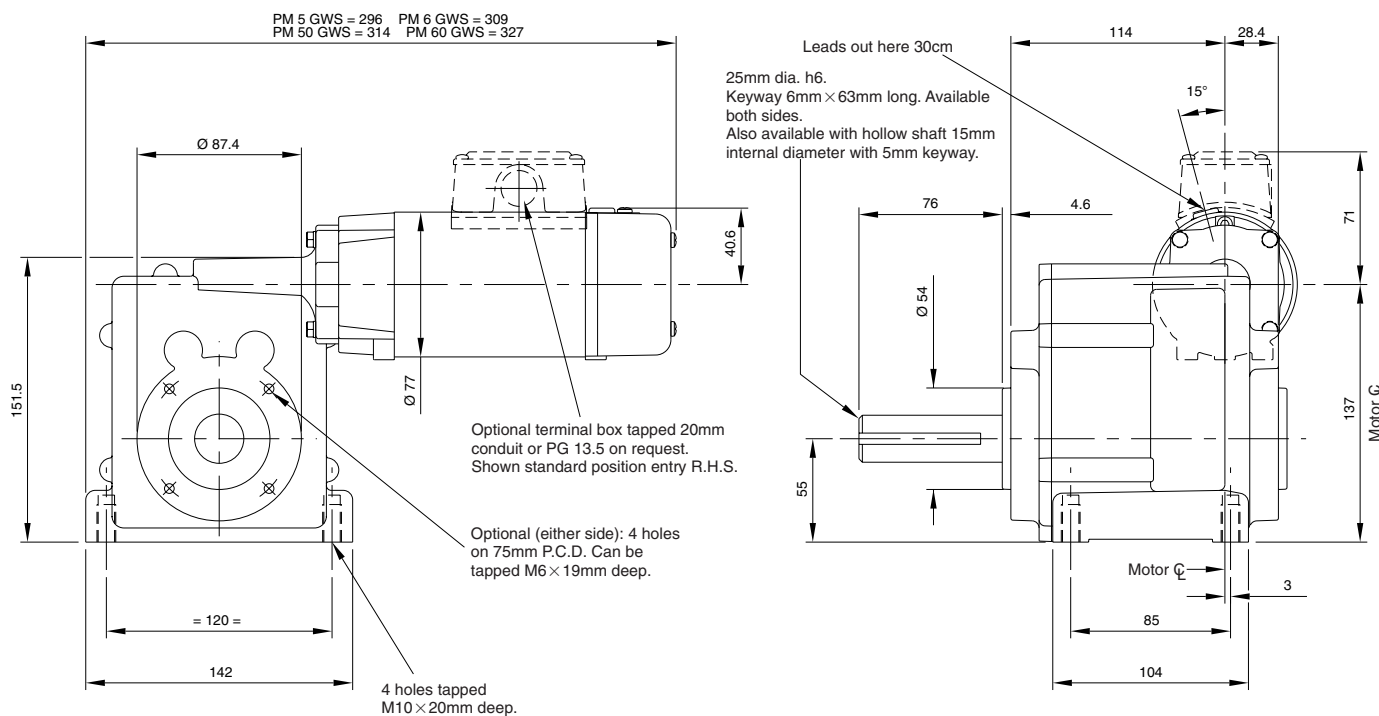
PM 50 GWS

(1 Nm = 10,2 cmkp)

Gearbox Specification Motor Speed 4000 r.p.m.			PM 5 GWS			PM 6 GWS		PM 50 GWS			PM 60 GWS		
			Cont Motor Rating 160 watts	1 Hour Motor Rating 200 watts	15 MIN Motor Rating 250 watts	Cont Motor Rating 200 watts	30 MIN Motor Rating 250 watts	Cont Motor Rating 205 watts	1 Hour Motor Rating 265 watts	15 MIN Motor Rating 375 watts	Cont Motor Rating 280 watts	1 Hour Motor Rating 340 watts	15 MIN Motor Rating 460 watts
FINAL R.P.M.	RATIO		OUTPUT TORQUE (Nm)										
	WORM	SPUR											
1.2	30:1	110:1	250	250	250	250	250	250	250	250	250	250	250
2.2	16 1/2:1	110:1	250	250	250	250	250	250	250	250	250	250	250
3.9	9 1/3:1	110:1	180	225	250	225	250	230	250	250	250	250	250
5	7 1/4:1	110:1	152	190	237	190	237	194	250	250	250	250	250
7	5 1/8:1	110:1	110	137	171	137	171	140	182	250	192	233	250
10	7 1/4:1	57:1	78	97	121	97	121	100	129	182	136	165	224
11	6 1/6:1	57:1	68	85	107	85	107	87	113	159	120	145	195
16	10 1/3:1	25:1	45	57	71	57	71	58	75	105	79	90	129
19	8 1/3:1	25:1	39	49	61	49	61	50	65	91	69	83	112
26	6 1/6:1	25:1	31	39	48	39	48	40	51	73	54	66	89
30	12 1/3:1	11:1	24	30	37	30	37	31	40	56	42	51	69
44	8 1/3:1	11:1	18	23	28	23	28	23	30	42	32	38	52
59	6 1/6:1	11:1	14	18	22	18	22	18	24	33	25	30	41
71	5 1/8:1	11:1	12	15	19	15	19	16	20	28	21	26	35

Dimensions in mm. Scale 1:4
NB: Unit drawn is PM 50 GWS

PM 5 GWS – PM 50 GWS
PM 6 GWS – PM 60 GWS



Optional shaft at motor speed (lead end only) 10mm dia. x 33mm long.

Blower Units

1 or 3 Phase Induction Motors – Constant Speed – 12 – 220v DC Shunt and Permanent Magnet Blowers on request

Enclosures: – SD 21 B Totally Enclosed (IP 23)
SD 38 BM – SD 18 BL Totally Enclosed (IP 54)

SD 21 B SD 38 BM – SD 18 BL



SD 21 B



SD 38 BM



SD 18 BL

- **Voltage Range:** 110/120v – 220/240v. A.C. single phase, 50 Hz.
SD21B – 38BM – 18BL 220 – 380/440 A.C., three phase, 50 Hz, SD 38 BM – SD 18 BL frames only. Special voltages and frequencies, D.C. supply etc. quoted on request.
- **Motor Type:** Single phase SD 21 B shaded pole – SD 38 BM – SD 18 BL capacitor. Suitable for direct-on-line starting.
- **Bearings:** Shielded ball bearings, spring loaded for quiet running. Unit suitable for mounting in any position.
- **Casing:** Cast aluminium.

- **Impeller:** Steel – rust-proofed.
- **Connections:** SD 38 BM – SD 18 BL terminal box, SD 21 B 300mm P.V.C. flexible.
- **Weight:** SD 21B – 2.75 kg; SD 38 BM – 4.5 kg; SD 18 BL – 8 kg.
- **Note:** 2500/2800 r.p.m. is standard and will be supplied unless otherwise specified.
- **Important:** Motor rotation must be set to give **anticlockwise** direction, as arrow on casting.

Motor Speed 2500 – 2800 r.p.m.				
SD 21 B	INCHES/W.g.	CU./FT./MIN.	Cm/Ws	CU./METRES/MIN.
240v A.C. 1 phase 50 Hz 0.2 Amp 40 watts	0 0.1 0.2	80 75 70	0 0.254 0.508	2.26 2.13 1.98
220v A.C. 1 phase 50 Hz 0.18 Amp 35 watts	0.3 0.4 0.5	66 60 54	0.76 1.016 1.27	1.86 1.7 1.53
Starting current approx. 2½ x FL current	0.6 0.68 0.7	46 22 5	1.52 1.72 1.78	1.3 0.62 0.14
SD 38 BM	INCHES/W.g.	CU./FT./MIN.	Cm/Ws	CU./METRES/MIN.
240v A.C. 1 phase 50 Hz 0.55 Amp 95 watts	0 0.2 0.4	127 120 113	0 0.508 1.016	3.59 3.4 3.2
220v A.C. 1 phase 50 Hz 0.45 Amp 80 watts	0.6 0.7 0.9	104 99 89	1.53 1.77 2.3	2.94 2.8 2.5
Starting current approx. 2½ x FL current	1.0 1.1 1.2	79 66 4	2.54 2.79 3.04	2.24 1.87 1.13
SD 18 BL	INCHES/W.g.	CU./FT./MIN.	Cm/Ws	CU./METRES/MIN.
240v A.C. 1 phase 50 Hz 1.1 Amp 260 watts	0 0.5 1.0	320 290 250	0 1.27 2.54	9.04 8.19 7.06
220v A.C. 1 phase 50 Hz 1.0 Amp 245 watts	1.5 1.75 2.0	215 175 75	3.81 4.44 5.08	6.07 4.92 2.12
Starting current approx. 2½ x FL current	2.2 0	0	5.59	0

Motor Speed 1380 – 1400 r.p.m.				
SD 21 B	INCHES/W.g.	CU./FT./MIN.	Cm/Ws	CU./METRES/MIN.
240v A.C. 1 phase 50 Hz 0.25 Amp 30 watts	0 0.05 0.1	43 37 32	0 0.127 0.254	1.23 1.06 0.9
220v A.C. 1 phase 50 Hz 0.2 Amp 28 watts	0.13 0.15 0.16	27 21 11	0.76 0.38 0.406	0.765 0.595 0.325
Starting current approx. 2 x FL current	0.17 0	0	0.43	0
SD 38 BM	INCHES/W.g.	CU./FT./MIN.	Cm/Ws	CU./METRES/MIN.
240v A.C. 1 phase 50 Hz 0.23 Amp 42 watts	0 0.1 0.15	65 58 53	0 0.254 0.38	1.84 1.66 1.52
220v A.C. 1 phase 50 Hz 0.2 Amp 35 watts	0.2 0.25 0.275	47 36 20	0.52 0.635 0.7	1.34 1.03 0.58
Starting current approx. 2 x FL current	0.3 0	0	0.76	0
SD 18 BL	INCHES/W.g.	CU./FT./MIN.	Cm/Ws	CU./METRES/MIN.
240v A.C. 1 phase 50 Hz 0.7 Amp 160 watts	0 0.1 0.3	220 185 145	0 0.25 0.76	6.21 5.22 4.09
220v A.C. 1 phase 50 Hz 0.6 Amp 150 watts	0.4 0.45 0.51	102 62 0	1.02 1.14 1.29	2.88 1.25 0
Starting current approx. 2½ x FL current	0	0	0	0

SD 21 B

**SD 38 BM
SD 18 BL**

Dimensions (mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
SD 21 B N.T.S.	163	36	54	86	30	49	15	70	25	83	77	85	72	5.1	73	51	92	43	7.1	40.5	66.7
SD 38 BM N.T.S.	197	36	57	89	36	67	20	96	36	97.5	82.2	108	87	7.1	92	66	111	52.4	7.1	62.6	69.8
SD 18 BL N.T.S.	244	33.3	76	114	45	83	23	111	46	105	103	127	92	7.1	111	82	133	67	9	72	95.2

Blowers